

ABSTRACT OF THE DISCLOSURE

A packet switch identifies a communication flow carried across an IP network, observes the communication flow, and acquires statistics data thereof, such as the number of packets that passed through the switch, the number of discarded packets, time at which the packets arrived at the switch, and time at which the packets were sent out from the switch. The packet switch continues to acquire the statistics data on the communication flow while the communication flow continues. If the packet switch performs a relay function, it sends the locally obtained statistics data to the adjoining packet switch placed downstream. If the packet switch is a node placed on either end edge of the network, it gathers the statistics data obtained by and delivered from other switches in the network and sends the gathered statistics data to the network management system.